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HABIT-FORMING AGENTS:

THEIR INDISCRIMINATE SALE AND
USE A MENACE TO THE
PUBLIC WELFARE.

BY

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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF CHEMISTRY,
Washington, D. C., December 16, 1909.

SIR: I have the honor to transmit for your approval a manuscript prepared in the Division of Drugs, of this Bureau, on the indiscriminate sale and use of habit-forming agents, the investigation of that division having revealed the alarming extent to which such agents are used, and the large number of channels through which they reach the public, which is not informed as to their nature. I recommend that the manuscript be published as a Farmers' Bulletin, that this information, so intimately connected with public health, may be widely disseminated.

Respectfully,

H. W. WILEY,
Chief, Bureau of Chemistry.

HON. JAMES WILSON,
Secretary of Agriculture.

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HABIT-FORMING AGENTS.

EXTENT OF IMPORTATION AND USE.

Notwithstanding the fact that legislation, federal, state, and territorial, adverse to the indiscriminate sale and use of opium has been enacted during the past decade, and most physicians are using greater circumspection than formerly when prescribing opium, its preparations and derivatives, the amount of opium (exclusive of smoking opium, which is now denied entry into this country), consumed in the United States per capita, has been doubled within the last forty years. Not only has there been this increased consumption of opium, its preparations and derivatives, but large quantities of other habit-forming agents, introduced chiefly for medicinal purposes, have been used. For example, "cocain"^a (cocain hydrochlorid), has been used for about twenty-five years, and the amount consumed at present is estimated at approximately 150,000 ounces per annum. In addition, it is well known that large quantities of acetanilid, acetphenetidin, antipyrin, phenacetin, caffein, and chloral hydrate, and smaller amounts of codein, dionin, and heroin are consumed. It should be noted that the amount of opium imported into the United States so far during the present decade indicates that the amount per capita is about the same as for the preceding ten years. Deterrent factors are undoubtedly antinarcotic legislation and publicity.

There are at present at least 100 sanatoriums advertising treatment for drug addiction, and it is well known that many thousands of cases are treated annually by physicians in private practice and general hospitals. The writer knows of at least 30 so-called mail-order "drug-addiction cures," some of which apparently have a large patronage. The manager of one of these treatments stated that his company had 100,000 names, including alcohol addicts, upon its books. The number of drug addicts in the United States is variously estimated by those who are conversant with the situation at from 1,000,000 to 4,000,000; the latter number is probably excessive.

^a The words "cocain," "codein," and "morphin," as used in this bulletin, refer to the salts of the respective alkaloids.

LABELING.

During the last ten years the writer has examined hundreds of preparations containing one or more habit-forming agents, exclusive of alcohol. It was not an uncommon practice in former days to represent to the consumer that such agents were absent, when as a matter of fact the very drugs named in the disclaimer were present. The reason for this subterfuge is plain. Normally no one desires to take preparations containing known habit-forming agents, which are frequently responsible for the use of, or demand for, the preparations containing them. During the last few years both federal and state laws have been enacted requiring a declaration on the label of the quantity or proportion of certain habit-forming agents when present in remedies intended for the treatment, mitigation, or prevention of disease in man or animals, but the consumer in many instances is not sufficiently conversant with the deleterious and harmful nature of these agents to avoid them. Again, these pernicious drugs are present in products which may not be classed as medicines within the meaning of the above definition.

CLASSES OF PRODUCTS CONTAINING HABIT-FORMING DRUGS.

It is the purpose of this bulletin to consider (1) representative preparations which in all probability dispose to habit formation; (2) preparations known to produce drug addiction; (3) nostrums laden with habit-forming agents to be used in treating drug addicts, including those addicted to the tobacco habit; (4) those who are primarily responsible for their sale and use, and, lastly, (5) some measures which will minimize or tend to eradicate the evil. The several classes of products will be considered as nearly as practicable in the order in which they are used, from infancy to old age. It should be stated at this point that only the most commonly used and known products of each class are considered in this bulletin, but others of the several classes are under investigation, and it is expected that the results will be published as soon as completed.

SOOTHING SIRUPS.

Soothing sirups naturally occupy the first place in such a list. Under this title will be briefly considered baby sirups, soothing sirups, "colic cures," children's anodynes, "infant's friends," teething concoctions, etc. It has long been known to the medical profession that these products as a rule contain habit-forming agents, but the majority of mothers have been and still are ignorant of this fact, although some degree of publicity has been given the matter during recent years. Lest any suspicion or fear should be aroused in the mind of the mother by the fact that the presence of opium, mor-

phin, chloroform, cannabis indica, or some other harmful agent is declared upon the label, the manufacturer or dealer endeavors to allay such fear by statements of the following character: "Contains nothing injurious to the youngest babe;" "Mothers need not fear giving this medicine to the youngest babe, as no bad effects come from the continued use of it." Statements of the following character were also made in connection with preparations containing morphin or opium, or both, before the Food and Drugs Act went into effect: "This valuable remedy does not contain any opium, morphin, laudanum, or paragoric," and "It is free from all harmful agents."

Statements of this character have been largely eliminated, but in some instances they still appear in modified form either on the package itself, in the accompanying circular, or in unmasked form in newspaper advertisements. Notwithstanding the fact that these representations have been eliminated or modified so as to comply with the letter of the law, mothers, because of past representations and the fact that the false impressions left by them have not been corrected, believe that these soothing remedies are neither harmful nor habit-forming, and therefore give them with a certain feeling of security, with the result that in some instances the baby is put to sleep never to awake again. Numerous cases of this character are on record. In some instances, in which the remedy is freely used and the child does not succumb, there is developed a case of infant drug addiction. As soon as the effects of one dose pass away, the child becomes irritable and fretful, with the result that another dose is administered, the craving is met, and the child is quieted, a condition which is analogous in every respect to drug addiction among adults. Sometimes these children look plump and healthy, but as a matter of fact their flesh is soft and flabby and they withstand attacks of illness very poorly. The chief active agents of soothing sirups are well known to be opium, morphin, heroin, codein, chloroform, and chloral hydrate in some combination. The following are representative of this class:

- Children's Comfort (morphin sulphate).
- Dr. Fahey's Pepsin Anodyne Compound (morphin sulphate).
- Dr. Fahrney's Teething Syrup (morphin and chloroform).
- Dr. Fowler's Strawberry and Peppermint Mixture (morphin).
- Dr. Groves' Anodyne for Infants (morphin sulphate).
- Hooper's Anodyne, the Infant's Friend (morphin hydrochlorid).
- Jadway's Elixir for Infants (codein).
- Dr. James' Soothing Syrup Cordial (heroin).
- Kopp's Baby's Friend (morphin sulphate).
- Dr. Miller's Anodyne for Babies (morphin sulphate and chloral hydrate).
- Dr. Moffett's Teethina, Teething Powders (powdered opium).
- Victor Infant Relief (chloroform and cannabis indica).
- Mrs. Winslow's Soothing Syrup (morphin sulphate).

It is hardly believable that anyone, for the sake of a few dollars, would concoct for infant use a pernicious mixture containing cocain, but several such mixtures have been found during the last year. One was offered for importation, under the name "Espey's Syrup for Children's Dentition," which contained one-half grain of cocain hydrochlorid to each bottle of about 1 ounce. The injuriousness of this product was a sufficient ground for prohibiting its importation into the United States. Another element of danger in the use of soothing sirups is the fact that nurses often use them, unknown to mothers, for putting children to sleep. Several well-known soothing sirups, it is reported, have been introduced largely by nurses in this manner.

Soothing sirups containing habit-forming agents, used without discrimination, undoubtedly leave their impression on the delicate organisms of infants and induce tendencies which under unfortunate circumstances in future life may be aroused to activity and develop an evil habit of one form or another. The question arises: How is this condition to be met? The signs of the times point to two ways, namely, education, and the withdrawal of the dangerous articles, both measures appearing to be necessary. At present there are on the market, intended to be used for children, several mixtures free from the customary habit-forming agents, but they apparently do not give satisfaction as formerly, as manufacturers are constantly receiving calls for the "old kinds."

MEDICATED SOFT DRINKS.

During the last twenty years a large number of soft drinks containing caffein and smaller or greater quantities of coca leaf and kola nut products have been placed upon the market. Preparations of this class, on account of insufficient information, were formerly looked upon as harmless, but they are now known to be an impending evil. Centuries before cocain was introduced as a remedial agent, wonderful accounts of the energy-creating properties of coca leaves were chronicled. The phenomenal endurance attributed to the Peruvians and others was often ascribed to the stimulating effects produced by the chewing of coca leaves, and this idea has been widely exploited. It is believed to some extent at present that the use of cocain taken internally produces a sense of exhilaration, and the amount of muscular and mental power appears to be temporarily increased. Impetus was given to this belief by the enthusiastic reports of the virtues of this drug, published not only in medical literature but in the secular press as well. Cocain is one of the most insidious and dangerous habit-forming drugs at present known. Many lives have been wrecked and many crimes have been committed as a result of its use, and strenuous efforts are being made to curtail its employment. The amount present

in certain soft drinks is small, to be sure, but such an insidious, habit-forming drug certainly has no place whatever in these products. The presence of tropococain, an ally of cocain, has also been established. Not only is it most pernicious to add cocain to soft drinks in any quantity (usually in the form of coca leaf extract), but even the use of coca leaf extract so manipulated as to reduce the amount of cocain, or eliminate it altogether, must still be looked upon as a questionable practice, because any product or name which would suggest the presence of cocain or its allies, by taste or otherwise, must have a baneful influence. It is known that very small amounts of morphin or cocain, or even a suggestion as to their presence, will tend to destroy the equilibrium of reformed addicts and bring back the former craving.

The kola nut was prominently brought forward about twenty-five years ago as an agent for the relief of fatigue, but in this respect it



FIG. 1.—Some of the soft drinks containing caffein and coca leaf extract.

has been a disappointment. For some time it was thought that the nut possessed some peculiar substance which accounted for this characteristic, but searching investigations showed that its chief active agent is caffein. Whatever virtue the drug possesses, therefore, appears to be due largely, if not solely, to this constituent. In fact, at present mixtures of caffein and burnt sugar are extensively used in preparing various caffein-bearing soft drinks, instead of the kola nut and its extracts. The caffein used is derived chiefly from waste tea leaves. The virtues of coca leaves and kola nuts have been exploited together, and it was only natural that they should be combined in preparations which would represent the purported virtues of both. Such combinations were made with the result that quite a number of so-called soft drinks now on the market contain both of the habit-forming agents, cocain and caffein. It is not uncommon to find persons addicted to the use of medicated soft drinks. It is

also a well-known fact that many factory employees, stenographers, typewriters, and others subject to mental or nervous strain spend a large part of their earnings for drinks of this character. In passing it may be of interest to note that life insurance companies are considering the status of soft-drink habitués as future risks.^a

Various arguments have been advanced in justification of the use of caffen and the extract of coca leaves, treated or otherwise, in soft drinks. It is well known that parents, as a rule, withhold tea and coffee from their children, but having no knowledge of the presence of cocain, caffen, or other deleterious agents in soft drinks, they unwittingly permit their children to be harmed by their use. Manufacturers of drinks of this class, containing cocain, have been successfully prosecuted, for example, Koca Nola, Celery Cola, Wiseola, Pillsbury's Koke, Kola-Ade, Kos-Kola, Cafe-Coca, and Koke.

TREATMENTS FOR DISEASES OF THE NOSE AND LUNGS.

On account of their frequency, prominence, and difficulty of satisfactory treatment, diseases of the nose and lungs have received special consideration, not only by the best medical talent but also by charlatans entirely ignorant of the subject. The number of remedies concocted for the treatment of these afflictions is legion. Their vaunted values are, as a rule, dependent upon the presence of certain powerful drugs, such agents as cocain, chloral hydrate, codein, heroin, morphin, opium, and tobacco being present. Most prominent among the diseases for which such remedies are offered are asthma, catarrh, colds, coughs, consumption, and hay fever.

Asthma Remedies.

The exact cause of asthma is not definitely known by the medical profession at present. There is no known treatment which will eradicate the disease. The sufferer, however, is anxious to pay any price within his power to be freed from his infirmity, or at least to be relieved, which is the most that can be done by the most skillful physician. Notwithstanding this fact, numerous preparations are on the market which have in the past been represented as "cures," "infallible cures," "positive cures," and "specifics" for asthma, and these misrepresentations are still used in literature apart from the package, and in advertisements in newspapers, magazines, etc. Most of them consist of well-known substances in various proportions, among which are belladonna, stramonium, lobelia, potassium

^a A partial list of medicated soft drinks containing caffen, extract of coca leaves, extract of kola nut, etc., will be found in Senate Document No. 644, page 372, of the Sixtieth Congress, second session.

nitrate, potassium iodid, etc. There are, however, a goodly number exploited at present which have as their basic agents cocain, morphin, opium, or chloral hydrate. An example of the cocain type is "Tucker's Asthma Specific," which consists of a solution of cocain, and is sold throughout the United States as a result of extensive advertising and personal recommendation. The "Asthma Specific" consists of a bottle of medicine containing cocain, to be used as a spray with an atomizer. The price of the latter is \$12.50. Recent investigations show that the amount of cocain purchased by the promoter of this remedy from a single manufacturing house during four months varied between 256 and 384 ounces a month.

It is true that the amount of cocain introduced into the nose by means of a spray is small, but it is well known that exceedingly small amounts are required, when used in this manner, to produce constitutional effects. In fact, this is the popular manner in which cocain is taken by those addicted to its use. They are commonly known as "sniffers" or "coke sniffers" because of the fact that the cocain is sniffed into the nose.

Another instance brought to the writer's attention was the selling of cocain for the same purpose by a registered physician, who maintained that he had the right to send his treatment, as he called it, consisting essentially of cocain hydrochlorid, into interstate commerce to asthmatics and other persons similarly afflicted, without in any manner indicating upon the label of the package the fact that the preparation contained this injurious habit-forming drug.

Under existing laws, it is practically impossible to reach physicians engaged in practices of this character, provided they declare the presence of certain habit-forming drugs on the label and refrain from making false or misleading statements, for the reason that the state laws are so worded as practically to exempt physicians, and unfortunately there are a considerable number engaged in such dealings. If physicians of this type do not actually engage in the practice, they affiliate with some company or institution which is engaged in the business and in this way shift the responsibility and thus relieve themselves from liability under the present laws.

"Ascatco," an opium, arsenic preparation, represented as an Austrian product, is also largely used as a remedy for asthma and similar afflictions and enjoys a large sale. Another interesting treatment is known as "Davis' Asthma Remedy," put on the market by a dealer in real estate. The active agent of this commodity is chloral hydrate of which each dose contains from 1 to 8 grains. According to the directions: "Dose can be increased or diminished or taken as often as needed. If necessary, take as many as three doses all within fifteen minutes. Adults can repeat it as many as eight times in succession." On the label appears the following: "Tell others how it

benefits you after using it." The conditions here are most propitious for the formation and spreading of the chloral habit. These examples give an idea of the character of the remedies at present being exploited for asthma.

Catarrh Remedies.

The remedies offered for asthma are, as a rule, advertised for the treatment of catarrh also, but certain special remedies have also been devised specifically for the treatment of this condition. These contain the same habit-forming drugs, the usual one being cocain. Previous to the enactment of state and federal laws requiring the declaration of cocain when present in a commodity, such products as



FIG. 2.—Catarrh cures containing cocain.

Dr. Birney's Catarrh Powder, Dr. Agnew's Catarrh Powder, Dr. Cole's Catarrh Cure, Crown Catarrh Powder, etc., enjoyed very large sales. A number of the States, however, passed laws forbidding the sale of this class of mixtures except on physicians' prescriptions. It should be noted in this connection that the "catarrh cures" enumerated are, from the names, ostensibly devised by certain physicians, but there are good reasons for believing that no doctor of medicine has ever been connected with the introduction or promotion of these remedies. Several States required these concoctions to be marked "Poisons," which had a certain deterring effect. Many of the laws, however, were violated through some technicality, or rendered ineffective in other ways.

One of the conditions defeating the enforcement of the state laws was the fact that these pernicious products could be shipped in interstate commerce, without any information relative to the presence of cocain, to the addicts themselves or any other irresponsible person. When the federal Food and Drugs Act was passed it was apparent that products containing cocain or cocain derivatives must bear a statement on the label of the quantity or proportion contained in each ounce of the material, if shipped in interstate commerce or manufactured and sold in the District of Columbia or in territory subject to the jurisdiction of the United States. The result has been that most of these cocain-laden mixtures have been either taken off the market, sold locally, or shipped in interstate commerce by and through irresponsible persons. In some instances they are sent directly to the drug habitués by so-called reputable dealers. For example, a clergyman interviewed the writer some time ago as to the possibility of taking action against a certain firm supplying his communicants with a "catarrh powder," formerly known under the name of "Dr. Agnew's Catarrh Powder." He stated that the use of the powder was ruinous to some of his congregation and furnished the writer with the name of a large wholesaler in an adjacent State who furnished the remedy. A letter was written to this firm asking whether it would furnish Dr. Agnew's Catarrh Powder; and if so, what the charges would be. The firm was also advised that the reason for making the application was that the laws of the District of Columbia were so stringent and so rigidly enforced that it was exceedingly difficult, if not impossible, to purchase any cocain or cocain preparation in this jurisdiction. The firm in question responded to the effect that the desired article would be sent at a certain price. The amount named for three packages was transmitted by postal order and three packages of Dr. Agnew's Catarrh Powder were duly received.

Another case was that of a boy who had contracted the cocain habit. His father made inquiry as to whether it was possible for the federal authorities to interdict the sale of this commodity. He stated that in his home city the article was freely sold, and his son being known as a habitué, it was offered to him continually. The boy, about 18 years of age, stated that it was simply impossible for him to resist the temptation, and in order to save the family from disgrace he requested that he be sent into a country where cocain could not be purchased. He was accordingly sent to Germany, where he was at the time of the father's interview with the writer. It was also stated that the habit was contracted by the injudicious use of cocain in the treatment of catarrhal conditions by a reputable and well-known specialist. The father was anxious to bring his boy

back to America, but was afraid to do so, owing to the ease with which this dangerous drug could be obtained.

The medical profession, state boards of health, pharmacy boards, and others interested in the public welfare have instigated what might be considered a crusade against the indiscriminate sale of cocain or mixtures containing it, but, owing to the fact that there are many individuals in the country who are more interested in the dollar than in the welfare of mankind, there are many ways found of evading the laws. For example, the druggist is not restricted in his purchases of cocain, and there is no law except in a few States requiring him to keep a record of the amount of cocain he handles in any given period of time. The result is that some druggists surreptitiously dispose of cocain to persons known to be addicted to its use, or others introduced to him by "cocain sniffers." These victims are well aware that if they give information of any character relative to their source of supply it will be cut off immediately, and the result is that the druggist can sell the commodity in this way with comparative security.

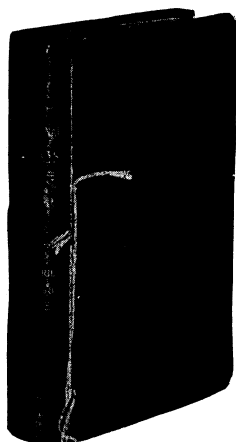


FIG. 3.—Book-box for surreptitiously peddling morphin (exterior).

Another source of difficulty is the so-called "morphin and cocain doctor." The laws permit the prescribing of these agents by doctors in their regular practice and to known drug habitués at their discretion or as the case may demand. The result is that in some cases there is little conscientiousness exercised in giving these prescriptions, and some doctors will write a large number of them for 25 cents each.

Another disturbing feature is the fact that some irresponsible persons obtain these commodities in various ways from others outside the jurisdiction of a State or the District of Columbia and peddle the same within a certain jurisdiction to their list of patrons. The ingenuity and cunning of these peddlers is astonishing. For example, one was discovered carrying about a supply of morphin and cocain in a book hollowed out for the purpose, as shown in the illustration. The edges of the leaves and one of the covers were glued together, and the body of the pages cut out, thus leaving a book-like box, which was innocent looking and well adapted for the business.

Cold and Cough Remedies.

Colds and coughs are among the most common ailments of childhood and youth, and many special mixtures have been devised and placed on the market for treating them. These concoctions usually

contain one or more habit-forming drugs, as is clearly shown by the following examples:

- Acker's English Remedy (chloroform).
- Adamson's Botanic Cough Balsam (heroin hydrochlorid).
- Dr. A. Boschee's German Syrup (morphin).
- Dr. Bull's Cough Syrup (morphin, later codein).
- Dr. Fenner's Cough-Cold Syrup (morphin).
- Jackson's Magic Balsam (chloroform and morphin).
- Kohler's One-Night Cough Cure (morphin sulphate, chloroform, and cannabis indica).
- Von Totta's Cough Pectoral (morphin and chloroform).

The same habit-forming agents are offered to the public in the form of confections under such names as cough lozenges and pastilles; examples:

- Linseed, Licorice and Chlorodyne Cough Lozenges (chloroform and ether).
- Linseed, Licorice and Chlorodyne Pastilles (morphin, chloroform, and ether).
- Pastilles Paneraj (morphin and codein).



FIG. 4.—Book-box for surreptitiously peddling morphin (interior).

Products of the above character should not find their way into the hands of the public for indiscriminate use. Such a practice is uncalled for, as efficient cough and cold remedies can readily be prepared without the use of these pernicious drugs. The legion of ubiquitous headache mixtures are also exploited for these ailments.

Consumption Cures.

The exploiting of so-called consumption cures has apparently always been an inviting field to quacks. Promoters of these remedies are lavish in advertising them as positive and infallible cures. From the nature of the disease and the general information available to the public, it is only natural that persons so afflicted should grasp at the last straw.

These remedies as a rule contain one or more of the well-known habit-forming agents, the action of which is to benumb the sensibilities and thus make coughing and some of the other symptoms less prominent and distressing, leading the victim to the belief that the medicine is actually bringing about the results claimed. The ravages of the disease are, however, neither checked nor abated in spite of the fact that the patient appears to feel better. On the contrary, the poisonous secretions, instead of being expectorated, are absorbed, thus increasing the poisons, or, as they are commonly called, toxins, in the body. The most disastrous feature of the scheme is that the unfortunate sufferer is robbed of valuable time which could be utilized to advantage in restoring his strength and health. It is well known that if treatment is begun early the disease can be arrested, but not by using these worthless and deceptive nostrums. Hundreds of thousands of dollars are spent annually in a campaign of education and in the treatment of this disease, and it is of the utmost importance to get control of the cases early, as there is little hope in the advanced stages. Some of the well-known remedies of this class are the following: "Piso's Cure, a Remedy for Coughs and Colds," formerly known as "Piso's Cure for Consumption" (cannabis indica and chloroform); "Shiloh's Cure," formerly known as "Shiloh's Cure for Consumption," Dr. Brutus Shiloh (heroin and chloroform); "Prof. Hoff's Consumption Cure" (opium); "Yonkerman's Consumption Cure," called "Tuberculozyne" (heroin); and "Gooch's Mexican Consumption Cure" (morphin sulphate)

HEADACHE MIXTURES.

These mixtures are advertised as cures or effective treatments for many ills of mankind, ranging from cholera morbus in infants to "brain fag" and exhaustion due to drunkenness. They have been the cause of many deaths and hundreds of cases of poisoning.

The amount of acetanilid, acetphenetidin, antipyrin, caffeine, etc., used in preparations of this class of habit-forming remedies is very large. Until recently it was claimed by some that these agents were harmless and did not belong to the habit-forming group. Later investigations, however, clearly show that this position is unwarranted. The medical profession for some time fondly believed that the depressing effects of acetanilid were counteracted by caffeine, which is present in most headache mixtures, but pharmacological experiments have shown that the assumption is erroneous. The caffeine in these mixtures may stimulate the heart to greater activity for a short period, but the depression induced by the acetanilid is persistent and increases in proportion to the amount used. Several preparations of this class, in addition to the usual ingredients, contain codein, a drug which is replacing opium and morphin to some

extent. Representative products of this class are: "Royal Headache Tablets," "Antikamnia and Codein Tablets," "Ammonal with Codein and Camphor," and "Sal-Codeia Bell." The subject of headache mixtures has been treated extensively in previous publications^a and the only object in referring to these remedies here is that none of the important links in the drug-addiction chain may be missing. These remedies in general simply benumb or stupefy the senses, but do not remove the cause of the trouble.

EPILEPSY REMEDIES.

One of the most pitiable and intractable diseases of mankind is epilepsy. There is no drug or mixture of drugs known to the medical profession which will eradicate the disease. The best that can be done for its victims is to diminish the frequency of the attacks by giving certain medicines and regulating the diet. These facts, however, do not deter the most ignorant from preying on these unfortunates. The various mixtures on the market contain one or more of the bromids, but a number contain, in addition, morphin or opium, the primary purpose of which is to create a demand for the remedy.

TOBACCO-HABIT CURES.

There are quite a number of so-called tobacco-habit cures on the market. All of them are ineffective, and some contain cocain in one form or another, which at once indicates the purpose of the promoter of the remedy. Instead of eradicating what is commonly believed to be a comparatively harmless habit, there is grave danger of fastening a pernicious drug habit upon the user. Examples of preparations of this character recently examined and found to contain cocain and cocain derivatives are Coca Bola, Tobacco Bullets, and Wonder Workers. The Coca Bola is marketed by Dr. Charles L. Mitchell, of Philadelphia, and the Tobacco Bullets by the Victor Remedy Company, now the Blackburn Remedy Company, of Dayton, Ohio, while the Wonder Workers were promoted by George S. Beck, of Springfield, Ohio.

DRUG-ADDICTION TREATMENTS.

With the exploiting and advertising of medicines containing habit-forming agents it is but natural to expect that drug addiction would result. It is only surprising that the number of cases is not greater. The reasons for this probably are, first, that the average individual is horrified to think of becoming a drug addict; second, the secret of many of the habitués dies with them; and, third, the most common

^a U. S. Dept. Agr., Bureau of Chemistry Bul. 126, entitled "The Harmful Effects of Acetanilid, Antipyrin, and Phenacetin," and Farmers' Bulletin 377, on the "Harmfulness of Headache Mixtures."

cases, i. e., those using cocaine, morphin, and opium, are short-lived, most of them dying within ten years after contracting the habit. The craving for the drug, with rare exception, can not be controlled or overcome as long as the drug is obtainable.

There are at present "mail order express treatments" for all kinds of drug addiction. All correspondence and transactions take place through the mails except the sending of the "dope" itself. It is usually represented by the exploiter that the habit can be successfully treated at home, by the particular treatment he is interested



FIG. 5.—Typical drug-addiction cures.

in, and its composition is a profound secret, known to him alone. As a rule, these treatments are composed of well-known drugs. In most instances they contain the very drug or drugs for which the treatment is advertised and sold. For example, one physician furnished a treatment to a supposed morphin addict containing, according to his own statement, 22 grains of morphin to the fluid ounce, and in addition 4 minims of fluid extract of cannabis indica in the same amount (see fig. 5).

Another "doctor" supplied a mixture containing on the average 14.2 grains of morphin sulphate to the ounce. A package sent out by

the James Sanitarium for the treatment of a supposed morphin addict contains 24 grains of morphin to the fluid ounce (fig. 5). A treatment of Habitina, supplied by the Delta Chemical Company, according to the label on the package, contains 16 grains of morphin sulphate and 8 grains of diacetyl morphin (the chemical name for heroin, a derivative of morphin) to the fluid ounce. An interesting practice in vogue is the sending of a supply consisting of a number of bottles marked from 1 to 18 inclusive, or whatever number there may be. In one instance, for example, 10 bottles were delivered marked "first supply," numbered from 1 to 10, inclusive, and every one bore the same inscription, namely, "Dionin 2½ gr., morphin 4 gr. per fluid ounce." Each bottle held about 4 ounces of fluid, which means that it contained 16 grains of morphin and about 10 grains of dionin, a morphin derivative.

There are at present at least thirty of these treatments sold throughout the United States. They are sent indiscriminately into any home, although some of them contain sufficient poison to kill a dozen men, and in only one instance has the writer observed a statement of warning relative to their poisonous character. Some of the promoters themselves have little knowledge of the dangerous character of the mixtures they are handling. For example, it was found that one of these treatments, handled by a groceryman who had neither medical nor pharmaceutical knowledge, was distributed to anyone asking for it. In some instances these men organized into firms or corporations and employed doctors to assist them in their nefarious business. The chief reason for employing a physician in this connection is to evade the various state laws, because a business of this character would probably be construed as practicing medicine, and such practice is denied to persons not legally qualified as medical practitioners. These physicians very well understand that there are at present no substances known to the medical profession which can be used successfully in the treatment of drug addicts without the careful supervision and restraining influence of the medical man himself and the constant attendance of a nurse acquainted with drug-addiction cases. It is well known that the drug addict is incapable of treating himself. The chief object of this practice seems to be to extract money from the unfortunate victims, who in many instances continue the treatment over a period of years.

In other instances the gradual reduction treatment is resorted to, but the reduction is very gradual, being in some instances at the outset 1 grain per month, when as much as 12 grains were used at the time the treatment was begun. In other cases no attention is paid to the progress of the patient, and if a second or third supply is ordered it is sent without question as long as the price is paid. This feature was clearly demonstrated by ordering from various institu-

tions and individuals their various treatments; after a lapse of time, without giving any information as to the progress of the case, the second treatment was shipped without question or inquiry as to the patient's condition. Furthermore, in some instances the amount of opium or morphin present in the second supply is even greater than that present in the first.

Another very interesting feature brought out in connection with this business is the fact that the demand for the treatments is greater in States having stringent antinarcotic laws; for example, the laws of Texas or California or of the District of Columbia, Virginia, etc., relative to the sale or disposition of opium, cocain, and morphin, or preparations containing the same, are rather stringent and rigorously enforced, with the result that the demand for these drug treatments is greater in these jurisdictions than in certain other sections of the United States. In some instances even physicians evolve and operate the schemes. Some state laws contain a clause making it illegal for a physician to prescribe indiscriminately to habitués, but in cases of the character under consideration, where most of the material is shipped out of the State, little attention is paid to the business by the local authorities. It is obvious that unscrupulous physicians are the prime transgressors in fostering the perpetuation of these fraudulent so-called drug-habit cures.

SUMMARY.

There are various remedies on the market used from infancy to old age containing habit-forming agents which can be purchased almost ad libitum by anyone. Many of the mixtures are concocted, directly or indirectly, through the aid of unscrupulous physicians, so called. Some illicit sales of cocain, morphin, etc., are also made by druggists, both wholesale and retail. A few physicians take advantage of the authority intrusted to them for the proper using of these habit-forming agents and prescribe for all requesting them, regardless of the health and welfare of the public. Physicians often are not circumspect enough in the writing and safeguarding of prescriptions containing these drugs. With these conditions obtaining, drug addiction has become a great evil, and the question naturally arises, How can it be minimized or eradicated? There is a great diversity of opinion on this point, but the following are the lines along which results can be expected:

First. Educate the public through the press and by pamphlets, lectures, etc.

Second. Enact laws forbidding the sale of all pernicious habit-forming drugs, such as cocain, morphin, opium, heroin, etc., and their derivatives and preparations, at retail, except on prescriptions of physicians, dentists, or veterinarians.

Third. Require a permanent record to be kept, subject to state and federal inspection at all times, of all transactions in such drugs, whether wholesale, retail, or through the use of prescriptions.

Fourth. Enact laws forbidding the handling of any of these products except by manufacturers, wholesale and retail druggists, and others legally qualified.

Fifth. The state boards of health, or other governing bodies, should be empowered to withdraw the licenses of physicians who prescribe or druggists who sell these articles for other than legitimate medicinal purposes.

Sixth. A federal law should be enacted forbidding the shipment in interstate commerce of habit-forming drugs or preparations containing them, except through the customary channels of trade, and then only when complete records of all transactions are kept.

[A list giving the titles of all Farmers' Bulletins available for distribution will be sent free on application to a Senator, Representative, or Delegate in Congress, or to the Secretary of Agriculture.]

